DECISION
of 12 April 2005

Case Number: T 0103/04 - 3.2.5
Application Number: 89907916.4
Publication Number: 0424435
IPC: B29C 33/10
Language of the proceedings: EN

Title of invention:
Process for injection molding

Patentee:
Melea Limited

Opponent:
Cinpres Gas Injection Limited
MöllerTech GmbH

Headword:
-

Relevant legal provisions:
EPC Art. 84, 123, 104

Keyword:
"Extension beyond the content of the application as filed (no, after amendment)"
"Clarity (yes)"
"Apportionment of costs (no)"

Decisions cited:
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Catchword:
-
DECISION
of the Technical Board of Appeal 3.2.5
of 12 April 2005

Appellant: Melea Limited
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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 30 October 2003 revoking European patent No. 0424435 pursuant to Article 102(1) EPC.

Composition of the Board:
Chairman: W. Moser
Members: W. R. Zellhuber
H. M. Schram
Summary of Facts and Submissions

I. The appellant (patent proprietor) lodged an appeal against the decision of the Opposition Division revoking the European patent No. 0 424 435.

II. The Opposition Division held that the patent in suit as having been amended in the course of the opposition procedure did not meet the requirements of Articles 84 and 123(2) EPC, respectively.

III. Oral proceedings were held before the Board of Appeal on 12 April 2005.

IV. At the end of the oral proceedings the final requests of the parties were as follows:

The appellant requested that the decision under appeal be set aside and, as a sole request, that the patent in suit be maintained on the basis of claim 1 presented during oral proceedings.

Respondents I and II (opponents 01 and 02) requested that the appeal be dismissed. Respondent II further requested that its costs incurred during oral proceedings be imposed on the appellant.

V. Claim 1 according to the sole request reads as follows:

"1. A process for injection molding a hollow plastic article (46; 64; 78) by means of a plastic injection molding apparatus (24; 50; 70; 70') including a mold cavity (36; 52) and a spill
cavity (40; 54; 56; 54'; 56'), flow coupled to said mold cavity (36; 52), comprising the steps of:

1.a) injecting a quantity of fluent plastic into the mold cavity (36; 52) having a shape defining at least a portion of the article (46; 64; 78);

2.a) displacing a portion of the plastic from the mold cavity (36; 52) into the spill cavity (40; 54; 56; 54', 56') by introduction of a charge of pressurized gas into the mold cavity (36; 52) at or near completion of the plastic injection;

2.b) said introduction of the charge of pressurized gas being timed to modulate the amount of plastic displaced;

3. permitting the injected plastic to solidify;

4. venting the gas from the mold cavity (36; 52); and

5. removing the plastic article from the mold."

VI. In the written procedure and during oral proceedings, the appellant argued essentially as follows:

The amendments made in claim 1 of the sole request were occasioned by objections raised with respect to the last filed claims submitted one month before the date of oral proceedings. Since these objections could easily be overcome by minor and readily comprehensible amendments, an appropriately amended request should be admitted, even though it was submitted during oral proceedings.

The subject-matter of claim 1 of the sole request was disclosed in the application as filed. Claim 1 according to the sole request contained the feature "by means of a plastic injection molding apparatus (24; 50; 70; 70') including a mold cavity (36; 52) and a spill
cavity (40; 54; 56; 54' 56'), flow coupled to said mold cavity (36; 52)", and, thus, contained the features which were essential for carrying out the claimed process. The insertion of such a means into a method claim should be allowed. The feature "by introduction of a charge of pressurized gas into the mold cavity (36; 52) at or near completion of the plastic injection" was disclosed on page 3, lines 13 to 17 of the application as filed.

The "novelty test" showed that there was no extension beyond the content of the application as filed.

The subject-matter of claim 1 of the sole request also met the requirements of Article 84 EPC.

It was clear for a person skilled in the art that the patent in suit concerned one single, unitary invention. Whilst the introductory portion of the description, cf. in particular, paragraphs [0010] and [0011], described the invention in a more general form, the portion of the description starting from paragraph [0015] described the invention in more details in connection with specific embodiments. There was no contradiction between the subject-matter of claim 1 of the sole request and the description.

Claim 1 according to the sole request contained all the essential features of the invention for which protection was sought, in particular, it contained the essential step of displacing the plastic from the mould cavity into a spill cavity, and it contained features of the apparatus which were necessary and sufficient for carrying out the claimed process. As a rule, the
description of embodiments of the invention might include additional features which were not essential and, thus, for the sake of clarity, did not need to be introduced into the claim.

A person skilled in the art would know what was meant by the term "near" used in feature 2.a) of claim 1 of the sole request. As described in paragraph [0011], column 4, lines 17 to 22 of the patent in suit, the introduction of gas was timed to modulate the amount of plastic displaced, which gave rise to a modulation of the properties of the article, namely the wall thickness. A person skilled in the art had thus to determine an appropriate time of gas injection at or near completion of the plastic injection, and, in that sense, would understand the meaning of that term.

The process of how to make hollow articles by gas injection was described, in particular, in paragraph [0005] of the patent in suit.

VII. In the written procedure and during oral proceedings, the respondents I and II argued essentially as follows:

The appellant had already submitted a large number of different claims. Consequently, any filing of further claims constituted an abuse of process, and, in particular, it would be unfair to allow further claims on the day the oral proceedings were held.

Furthermore, the subject-matter of claim 1 according to the sole request was not disclosed in the application as filed. Claim 1 now contained features describing the apparatus. In that case, however, it would have been
necessary to include all the features of the apparatus referred to on page 7 of the application as filed. What the appellant had done was "cherry-picking". Selecting particular features out of the whole content gave rise to a generalisation for which no basis could be found in the application as filed. Thus, the requirements of Article 123(2) EPC were not met.

Moreover, claim 1 of the sole request was not clear:

- Essential features and parts of the apparatus (i.e. gas injection means, venting means, a modified sprue bushing) necessary for carrying out the invention were omitted in the claim.

- Claim 1 did not indicate that the portion of plastic to be displaced was still fluent plastic. The claim thus left open whether the plastic to be displaced was still fluent or solid.

- Claim 1 was completely devoid of any process step indicating how to make a hollow body.

- The timing feature 2.b) of claim 1 according to the sole request only appeared in paragraph [0011] of the description of the patent in suit, whilst in the embodiments disclosed in paragraphs [0020] and [0028] of the description of the patent in suit and the process scheme depicted in Figure 1 of the patent in suit (cf. step 14) alternative processes of modulating the quantity of plastic to be displaced were described. Consequently, claim 1 was not clear when read in conjunction with the description.
The expression "at or near completion ..." in feature 2.a) comprised the relative term "near", and, therefore, had no clear meaning.

VIII. Respondent II argued that the appellant ignored the alleged legal argument that filing of two independent claims replacing the single independent claim of the patent in suit as granted, as done in the statement setting out the grounds of appeal, contravened Article 123(3) EPC. The failure to observe this argument, together with the long duration of the opposition and appeal proceedings, and the fact that important issues like novelty and inventive step had not yet been dealt with, justified the request that the costs incurred by respondent II during oral proceedings be imposed on the appellant.

Reasons for the Decision

1. Procedural matters

The sole request was submitted by the appellant during oral proceedings. It included amendments occasioned by formal objections raised with regard to the sets of claims submitted before the final date set by the Board for filing written submissions.

The amendments concerned the deletion of specific features concerning the apparatus. In the Board's judgement, the amendments were easily comprehensible and did not constitute an unpredictable change of the subject-matter. Accordingly, the Board allowed the introduction of the sole request into the proceedings,
which, in the Board's judgement, did not give rise to an unbalanced treatment of the parties.

2. **Extension (Article 123 EPC)**

The subject-matter of claim 1 of the sole request is disclosed in the printed version of the application as filed in claim 1 in connection with the passage on page 3, lines 1 to 19 of the description.

In particular, in claim 1 of the application as filed, the process for injection moulding a hollow plastic article including the steps of injecting plastic, displacing a portion of plastic by the introduction of gas, permitting the plastic to solidify, venting, and removing the article is disclosed. The above-mentioned passage in the introductory portion of the description further refers to those features of the apparatus which form part of claim 1 of the sole request (mould cavity, spill cavity, flow coupled to the mould cavity). Furthermore, the time of the introduction of gas is indicated (at or near the completion of the plastic injection). Accordingly, the above-mentioned portions of the application as filed form a basis for the subject-matter of claim 1 of the sole request. There is no indication that any unallowable generalisation has occurred. It is noted that, in the above-mentioned passages of the application as filed, there is no reference to particular parts of the apparatus like a sprue bushing or particular venting means, which, admittedly, are suitable for carrying out the process, but relate to a particular embodiment of an apparatus described on page 7 of the application as filed.
In the Board's judgement, the amendments have been made in accordance with the requirements of Article 123(2) EPC. For the sake of completeness, it may be noted that the "disclosure test" goes beyond the "novelty test" in that it includes considerations of a possible, in view of Article 123(2) EPC unallowable, extension due to a generalisation.

2.1 Furthermore, the amendments made in claim 1 of the sole request, namely specifying the time of the introduction of gas (at or near the completion of the plastic injection) and that the process is carried out by means of a plastic injection moulding apparatus including a mould cavity and a spill cavity flow coupled to said mould cavity, do not give rise to an extension of the scope of protection conferred beyond that of claim 1 of the patent in suit as granted.

3. The patent in suit as amended thus meets the requirements of Article 123(2) and (3) EPC.

4. Clarity

In the Board's judgement, claim 1 of the sole request is comprehensible from a technical point of view and clearly defines the matter for which protection is sought.

4.1 There is neither an explicit nor an implicit indication in the description of the patent in suit that the particular features of the apparatus described in paragraph [0030] in connection with Figure 4 of the patent in suit constitute essential features of the invention. Actually, that paragraph concerns a
particular embodiment of the invention, cf. paragraph [0015] of the patent in suit.

4.2 In the Board's judgement, a person skilled in the art would understand that the portion of plastic to be displaced according to the process as claimed in claim 1 of the sole request has to be still fluent rather than solid.

4.3 Claim 1 of the sole request concerns a process for injection moulding a hollow plastic article and includes the steps which are essential for making a hollow article. For the sake of clarity of the claim, there is no need to explain in the claim how that hollow part of the article is actually formed.

4.4 According to feature 2.b) of claim 1 of the sole request, the introduction of the charge of pressurized gas is timed to modulate the amount of plastic displaced. In the Board's judgement, in order to displace a desired amount of still fluent plastic from the mould cavity into the spill cavity, an appropriate timing of the gas injection is required, regardless of whether the amount is determined by the volume of the spill cavity or by appropriately selecting the pressure of the gas in amount and duration as described in paragraphs [0020] and [0028], respectively, of the patent in suit.

Consequently, there is no contradiction between the subject-matter of claim 1 of the sole request and the description.
4.5 In feature 2.a) of claim 1 of the sole request, the term "near" is used, which was objected to by respondent I as being a relative term and thus unclear. However, the term is used within the expression "at or near completion of the plastic injection", and has to be seen in the context with other features describing the process for which protection is sought. Actually, the expression "at or near completion of the plastic injection" links the time of gas injection to the time of completion of plastic injection without demanding the coincidence of these two events. In the Board's judgement, feature 2.a) of claim 1 of the sole request is thus a clear and comprehensible feature.

Claim 1 according to the sole request thus meets the requirements of Article 84 EPC.

5. Apportionment of costs

The decision under appeal was against the appellant. It is thus the appellant's right to file an appeal, to defend its case in a way it finds suitable, and, in accordance with Article 116 EPC, to request oral proceedings, which the appellant and respondent I actually did. Neither the appellant's approach, nor the length of the proceedings, nor the fact that issues like novelty and inventive have not yet been dealt with give rise to any unfair or partial treatment of the parties.

Consequently, in accordance with Article 104 EPC, each party to the proceedings shall meet the costs it has incurred, which implies that the request of respondent II concerning apportionment of cost is thus refused.
Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the Opposition Division for further prosecution.

3. The request of respondent II concerning apportionment of costs is refused.

The Registrar: 

M. Dainese

The Chairman:

W. Moser